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Message chair controller  
KP03  
product manual

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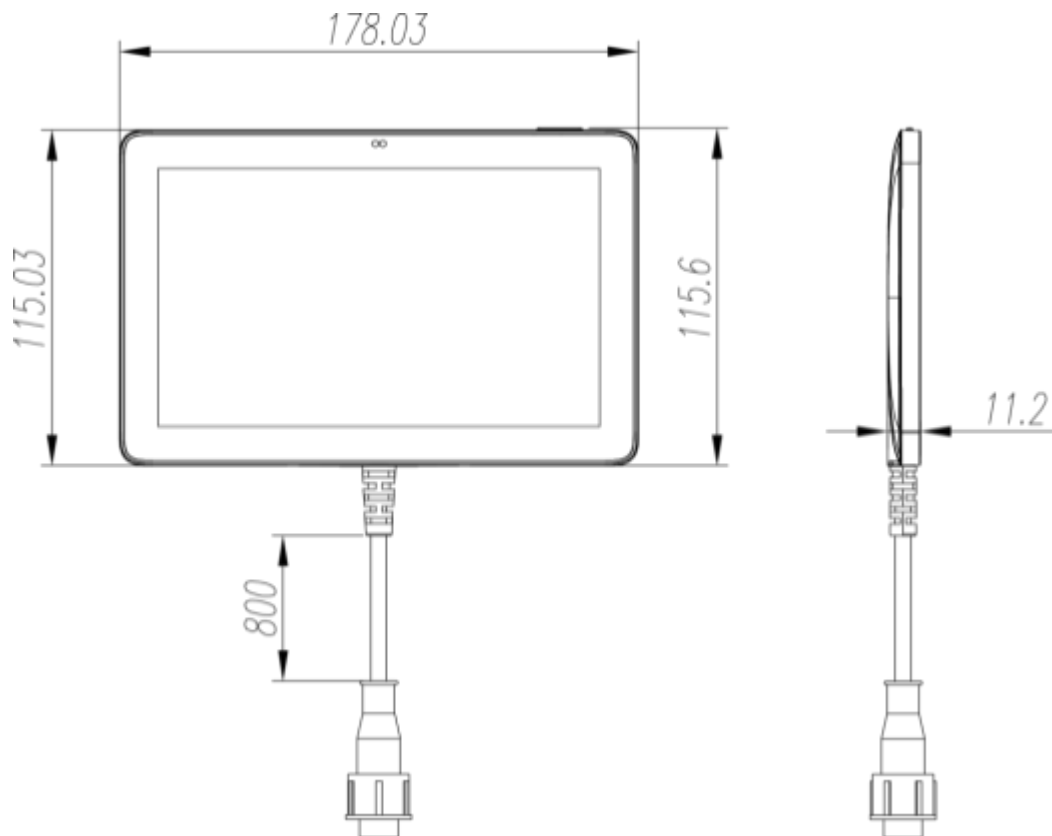
**Revision Record**

date	edition	author	remarks
2023.04.17	V1.0	Luo Jinhai	new-built
2023.05.15	V1.1	Luo Jinhai	1. Document name modification (delete KP 03, this specification is defined as a series specification) specification 2. Add the WIFI function description

## 1 Product brief

This series of products is the android system massage chair control screen, used for massage chair human-computer interaction, using the UART interface to communicate with the massage chair host.

## 2 Product appearance



## 3 Product color and packaging material

### 1. Packaging list:

Silver hand controller, white wire (white wire plus transparent protective bag), transparent bubble bag, pearl cotton, batch traceability code





## 4. Product function and performance

This product mainly has the following functions :

1. Realize the human-computer interaction with the massage chair;
2. Light sensing and distance sensing function;

order number	product model	product features	remarks
1	KP03		OG custom made

explain :

- (1) This article is only applicable to the models listed above;
- (2) For the specific functions of each model, see the "Hardware Configuration Table";

## 4.1 Functional description

### 4.1.1 Hardware configuration

function	Specification description	KP03	remarks
CPU	Quad-core 1.3 GHz, Cortex-A7 architecture CPU	√	
FLASH	4 GB	√	
SDRAM	512 MB	√	
Serial communication	UART	√	
display screen	6.95 inch LCD , 1024 RGBx600 pixels	√	
touch screen	capacitive touch screen	√	
Infrared induction	>30 c m	√	
key	power switch	√	
WIFI	2.4G	√	
Schematic diagram of interface	Interface diagram A	√	

Power Supply Voltage	DC5V (powered by a massage chair)	√	
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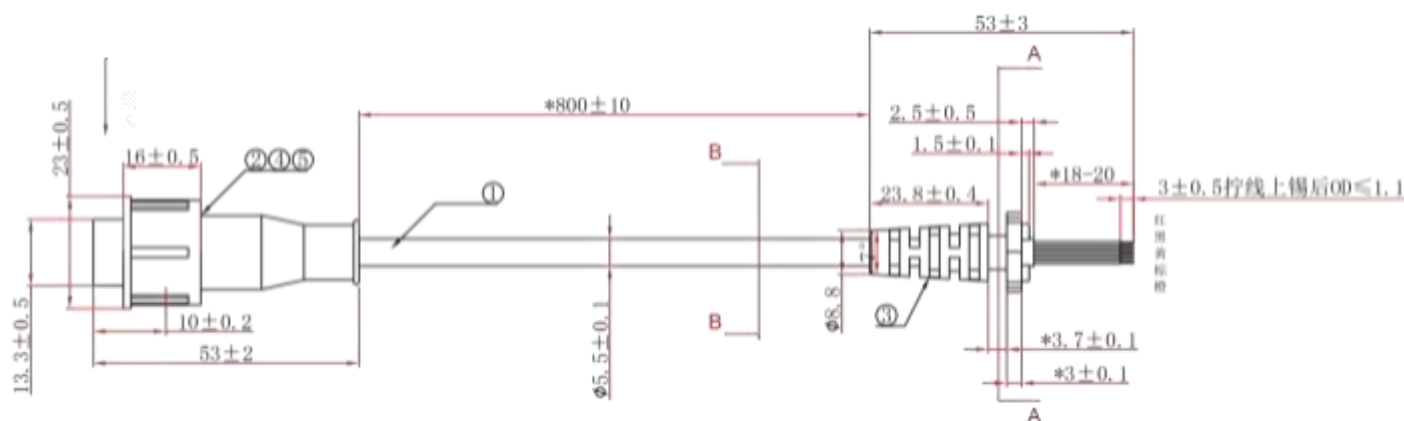
**Product function option description :**

" √ " : Indicates that the product supports  
this function and is standard ; " " : means that  
the product does not support this function ;

" $\Delta$ ": Product reserved function, only used for special orders, not configured by default;

type	description	remarks
operating system	Android4.4.2	
protocol type	TCP/IP	
signal transmission form	TCP/ IP、 UART	

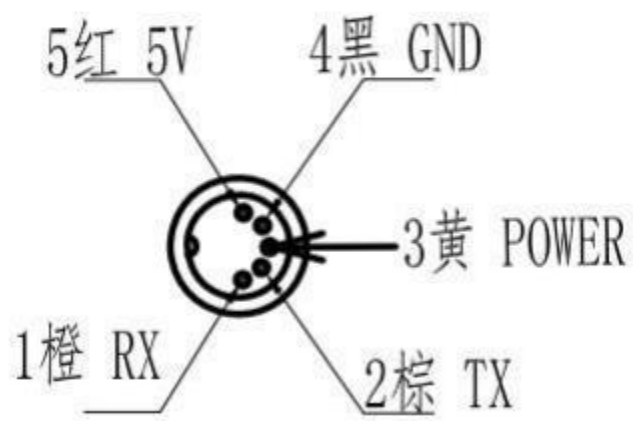
#### 4.2.1 Interface schematic diagram:



4.2.2 Definition of the interface pin

order number	Feet name	functional description
Power interface		
/	/	DC interface, connect to 5V power supply (powered by massage chair mainboard)
CI		
/	/	UART interface, connecting the control screen and the massage chair

4.2.3 Interface function description and wiring diagram



4.3 Performance indicators

- (1) ESD: ±20 KV;
- (2) Radiation emission: refer to the national standard, and leave a 6 dB margin ;
- (3) Certification requirements: SRRC certification ;

4.4 Technical parameters

2.4.1 Electrical performance

order number	product model	rated voltage	power rating	Standby power	remarks
1	KP03	DC5V±10%	7W		

4.4.2 Working environment

Operating temperature: -10℃ ~ + 55℃  
Storage temperature: -10℃ ~ + 60℃



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#### FCC Statement:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
  - (2) this device must accept any interference received, including interference that may cause undesired operation.
- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### IC Statement:

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

#### Specific Absorption Rate (SAR) information:

This device meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. The SAR limit of USA (FCC) is 1.6 W/kg averaged. Device types: KP03 controller (FCCID: YMX-KP03 ) has also been tested against this SAR limit. SAR information can be viewed online at <http://www.fcc.gov/oet/ea/fccid/>. Please use the device FCC ID number for search. This device was tested simulation typical 0mm to body. To maintain compliance with FCC RF exposure requirements, the use of accessories should maintain a separation distance between the user's bodies mentioned above, the use of accessories should not contain metallic components in its assembly, the use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

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